

## UNITRONIC® BUS PB FD FRNC FC

Flame retardant, highly flexible PROFIBUS cable - with fast connect cable make up, UL/CSA certified

Bus cable for PROFIBUS-DP, -FMS and FIP. UL/CSA-approved, halogen free, flame retardant, oil resistant. Temperature range from -40°C bis +80°C

LAPP KABEL STUIGART UNITRONIC® BUS PB FD FRNC FC



Supplementary automation components from Lapp



Mechanical and plant engineering



Flame-retardant



Halogen-free



Oil-resistant



Power chain

### Benefits

Fast Connect (FC) system

For use where the combination of a halogen-free outer sheath with properties similar to PUR and enhanced flame-retardance is required

Cables can be used for PROFIBUS-DP as well as PROFIBUS-FMS and FIP

### Application range

For highly flexible use in energy supply chains or permanently moving machines and linear robots

This cable provides special advantages for use in sensitive areas where fire propagation must be avoided and the presence of toxic fumes would cause personal injury and damage to equipment.

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### Product features

Halogen-free

Oil-resistant

Vertical Tray Flame Test according to UL 1685

Based on the bit rates listed, in accordance with PNO specifications the following maximum cable lengths for a bus segment apply (cable type A, PROFIBUS-DP):

93.75 kbit/s = 1200 m

187.5 kbit/s = 1000 m

500 kbit/s = 400 m

1.5 Mbit/s = 200 m

12.0 Mbit/s = 100 m

### Norm references / Approvals

The cable is UL/CSA-certified (CM)

### Product Make-up

Stranded bare copper wire

Core insulation: foam skin, (O2YS)

Overall screening with copper braid and plastic-laminated aluminium foil

Inner sheath: thermoplastic and halogen-free material

Outer sheath: PUR, violet (RAL 4001)

### Technical Data

|                           |   |
|---------------------------|---|
| Classification ETIM 5:    | ETIM 5.0 Class-ID: EC000830<br>ETIM 5.0 Class-Description: Data cable   |
| Classification ETIM 6:    | ETIM 6.0 Class-ID: EC000830<br>ETIM 6.0 Class-Description: Data cable   |
| Mutual capacitance:       | nom. 28 nF/km   |
| Peak operating voltage:   | (not for power applications) 250 V                                      |
| Minimum bending radius:   | Fixed installation: 10 x outer diameter<br>Flexing: 15 x outer diameter |
| Test voltage:             | Core/core: 1500 V rms   |
| Characteristic impedance: | (3 - 20 MHz): 150 ± 15 Ohm  |
| Temperature range:        | Flexing: -30°C to +70°C<br>Fixed installation: -40°C to +80°C           |

### Note

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

Please find our standard lengths at: [www.lappkabel.de/en/cable-standardlengths](http://www.lappkabel.de/en/cable-standardlengths)

Packaging size: coil ≤ 30 kg or ≤ 250 m, otherwise drum

Please specify the preferred type of packaging (e.g. 1 x 500 m drum or 5 x 100 m coils).

Lapp Kabel is a member of the PROFIBUS user organisation (PNO)

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

Prices are net prices without VAT and surcharges. Sale to business customers only.

**UNITRONIC® BUS PB FD FRNC FC**

| Article number | Article designation          | Number of pairs and conductor diameter (mm) | Outer diameter [mm] | Copper index (kg/km) |
|----------------|------------------------------|---|---------------------|----------------------|
| 2170997        | UNITRONIC® BUS PB FD FRNC FC | 1x2x0,64                                    | 8                   | 26                   |

Last Update (02.05.2024)

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Product Management [www.lappkabel.de](http://www.lappkabel.de)

You can find the current technical data in the corresponding data sheet.

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